AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated below. This listing of claims will replace all prior versions and listings of claims in the application:

1.-14. (Cancelled)

15. (Currently Amended) A method for planning a telecommunication network for radio apparatuses including a plurality of cells distributed over a geographical area by considering time-dependent characteristics of the network, wherein each cell ~~of which~~ comprises a set of elementary pixels adapted to receive a radio signal irradiated by a fixed radio base station, the method comprising:

determining for each cell a service area comprising the location of the pixels of the cell in which the network, on the basis of a pre-set limit value (η_{lim}) of a cell load factor (η), is able to provide predetermined services to the mobile apparatuses located therein;

identifying a selection sequence in time of the pixels belonging to the service area pertaining to a pre-set cell according to a criterion for selection in succession, wherein the criterion for selection in succession is based on the values of a sorting function ($R_{m,n}$) which is a function of at least the quantity of traffic ($T_{m,n}$) pertaining to the pixel being examined; and

computing the service area as a set of the pixels of the cell that are in succession selected so that the sum of the contributions due to each pixel does not exceed the pre-set limit value (η_{lim}) of the cell load factor (η).

16. (Previously Presented) The method as claimed in claim 15, wherein said sorting function is a function ($R_{m,n}$) of the value of electromagnetic attenuation ($a_{m,n}$) between the fixed radio base station of the pre-set cell and the pixel being examined, and of the quantity of traffic ($T_{m,n}$) pertaining to the pixel being examined.

17. (Previously Presented) The method as claimed in claim 15, further comprising computing macro-diversity areas in which, for each service area previously calculated, a verification is made as to whether the pixels outside said area, but in which the signal irradiated by the fixed radio base station is received with a power exceeding a predetermined threshold can be served by radio base stations of adjacent cells.

18. (Previously Presented) The method as claimed in claim 15, further comprising determining the areas in unavailability or outage conditions, by considering pixels belonging to the service area according to a criterion for selection in succession determined by said sorting function ($R_{m,n}$).

19. (Previously Presented) The method as claimed in claim 15, wherein the pixels belonging to the service areas are selected starting from the location of the pixels in which the signal irradiated by the fixed radio base station is received by a mobile apparatus with a power exceeding a predetermined threshold in such a way that it can be recognised and decoded.

20. (Previously Presented) The method as claimed in claim 15, wherein the information about traffic distribution over the territory is computed starting from a plurality of predetermined values of traffic offered for each service per pixel ($T_{m,n,i}$) according to a relationship which, for each pixel, assigns a corresponding value of

equivalent traffic ($T_{m,n}$) as a function of variables that are representative of the characteristics of the radio connection.

21. (Previously Presented) The method as claimed in claim 20, wherein the value of equivalent traffic ($T_{m,n}$) for one pixel is computed according to the relationship:

$$T_{m,n} = \frac{1}{B_o}\sum_{i=o}^{S-1} B_i \cdot T_{m,n,i}$$

where:

S is the total number of services, B_o is the bit rate of the service at the lowest speed, B_i is the bit rate of the i^{th} service present in the pixel m,n, and $T_{m,n,i}$ is the traffic offered in the pixel m,n for the i^{th} service.

22. (Previously Presented) The method as claimed in claim 20, wherein said sorting function ($R_{m,n}$) is a function that is directly proportional to the value of electromagnetic attenuation ($a_{m,n}$) of the pixel and inversely proportional to the quality of traffic ($T_{m,n}$) of the pixel, according to the formula:

$$R_{m,n} = \frac{a_{m,n}}{T_{m,n}}$$

where:

$a_{m,n}$ is the attenuation between pixel m,n and radio base station and $T_{m,n}$ is the equivalent traffic of the pixel m,n and the selection of the pixels belonging to the service area takes place according to a succession determined by increasing values of said function ($R_{m,n}$).

23. (Previously Presented) The method as claimed in claim 20, wherein said sorting function ($R_{m,n}$) is expressed according to the formula:

$$R_{m,n} = \sqrt{\left[\left(\frac{T_{m,n}}{T_{p,q}^{Max}}\right)^2 + \left(\frac{a_{m,n}}{a_{i,j}^{Max}}\right)^2\right]}$$

where:

$a_{m,n}$ is the attenuation between pixel m,n and radio base station, and $T_{m,n}$ is the equivalent traffic of the pixel m,n, the values of attenuation ($a_{m,n}$), and of equivalent traffic ($T_{m,n}$) per pixel being normalised to the maximum value of equivalent traffic and to the maximum value of attenuation of the cell.

24. (Previously Presented) The method as claimed in claim 20, wherein said sorting function ($R_{m,n}$) is expressed according to the formula:

$$R_{m,n} = \left|\frac{T_{m,n}}{T_{p,q}^{Max}}\right|$$

where:

$T_{m,n}$ is the equivalent traffic of the pixel m,n, normalised to the maximum value of equivalent traffic of the cell.

25. (Previously Presented) The method as claimed in claim 15, wherein the load factor (η) of a cell is defined as the ratio between a predetermined acceptable load of the cell and the maximum load in correspondence with which instability arises, according to the relationship

$$\eta = \sum_{i=1}^{S} n_i \cdot SAF_i \cdot (1 + f_i) \cdot SNR_i$$

where:

S is the total number of services;

n_i is the maximum number of users simultaneously active in the cell for the i^{th} service;

SAF_i is the service activity factor of the i^{th} service;

f_i is the ratio between intracell interference and intercell interference; and

SNR_i is the signal/noise ratio for the i^{th} service.

26. (Previously Presented) A computing system for planning a telecommunication network for radio apparatuses, programmed to implement a method as claimed in any one of claims 15-25.

27. (Currently Amended) A telecommunication network for radio apparatuses ~~network plan~~ planned using the method as described in any one of claims 15-25.

28. (Currently Amended) A computer readable medium encoded with a computer program product ~~or group of computer program products~~ executable by at least one computing system, and directly loadable into an internal memory of a computer, ~~and being encoded onto a computer readable medium,~~ the computer program product comprising ~~one or more modules of~~ software code portions for the implementation of a method capable of planning a telecommunication network for radio apparatuses as claimed in any one of [[the]] claims 15-25.